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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/437,469	11/10/1999	ANTONIO DE RENZIS	3572-14	8020

7590 12/18/2003
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EXAMINER

MERLINO, AMANDA H

ART UNIT PAPER NUMBER

2877

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/437,469

Applicant(s)

DE RENZIS, ANTONIO

Examiner

Amanda H Merlino

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2, 5-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-7, 13-17 and 19 is/are rejected.
- 7) ☐ Claim(s) 8-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 3/21/00 was considered. A copy was mailed out with the last office action on 2/13/2003. A courtesy copy is being mailed with this office action. No other IDS is in this application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 5-7, 13-17 and 19 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Cameron et al (5,006,721).

Cameron et al teach of a method for measuring distance of an object comprising emitting a signal, directing the signal towards an object and the detecting the diffused light reflected from the surface and using the detected signal to calculate the distance wherein a calibration step is carried out to associated a prefixed distance with a prefixed comparison signal value.

Response to Arguments

Applicant's arguments with reference to claims 8-12 filed 8/7/2003 have been fully considered and are persuasive. The 103 rejection of claims 8-12 has been withdrawn.

Applicant's arguments with reference to claims 1-2, 5-7, 13-17, and 19 filed 8/7/2003 have been fully considered but they are not persuasive. Firstly applicant argues that the Cameron reference does not show how the calibration data is established. In column 3, lines 44-56 and more specifically in column 9, lines 43-56, Cameron specifically teaches the step of calibration by correlating prefix distance values with measured comparison signals by taking calibration measurements with a "calibration target" over different distances within the field of view of the scanning apparatus.

Secondly, applicant argues that the details of the detection and sampling steps are not present in the Cameron reference. However, examiner respectfully disagrees. Cameron et al specifically teaches the detecting step of detecting the signal diffused by the object along a scanning line (see abstract). With reference to the sampling, examiner believes that the present claims do not overcome the teachings of Cameron et al. The claims states that at least one sample representative of at least one point of the scanning line are used to obtain a numerical value of said at least one sample. Cameron et al teach of using one point (at least one sample) of a scanning line for calibration and measurement purposes. The claim does not clearly show the used of sampling as described in the specification.

Allowable Subject Matter

Claim 8-12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 18 allowed.

The following is an examiner's statement of reasons for allowance:

As to claims 8-12, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for measuring distance wherein a plurality of scans of the surface of known reflectance are carried out along the scanning line and a plurality of samples are extracted for each scan further comprising the steps of obtaining a mean scan of the plurality of scans and processing the mean scan so as to obtain a numerical values for the samples.

As to claims 18, the prior of record, taken alone or in combination, fails to disclose or render obvious a method for measuring distance comprising a calibration step wherein a prefixed distance is associated with a prefixed comparison signal by scanning light along the sample and then filling with the distance values associated to the numerical values obtained for the samples x_j , the items of a calibration matrix having, as index of column j a number from zero to the number of samples x_j extracted, and as index of row i , a number from zero to the maximum value of the numerical value obtained after the analog to digital conversion of the comparison signal, the method further comprising the step of filling the empty items (i, j) of the matrix comprises the

step of identifying column by column, the empty items (i, j) of the matrix and filling each of these empty items with a value obtained by linearly interpolating between the two numerical values differing from 0 that are nearer to the empty item, and belonging to the same column, in combination with the rest of the limitations of claims 11 and 18 respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax Machine located in Crystal Plaza 4. The form of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is:

703-872-9306

If the applicant wishes to send a Fax dealing with a Proposed Amendment for discussion for a phone interview then the fax should:

1) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Examiner Amanda H. Merlino* whose telephone number is (703) 305-3488. The examiner can be reached on Mondays and Thursdays only.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-0956.

Amanda H. Merlino *ahm*
Patent Examiner
Art Unit 2877
November 13, 2003/ahm

Frank G. Fontana
FRANK G. FONTANA
SUPERVISORY PATENT
EXAMINER